

Cervical Cancer in Virginia



Risk Factors¹

- Infection with human papillomavirus (HPV) is the major cause of cervical cancer. Thus, beginning sexual activity at an early age and having multiple sex partners are factors that put women at increased risk of acquiring HPV and developing cervical cancer. Many women become infected with HPV that does not progress to cervical cancer. Immunosuppression and cigarette smoking are risk factors for progression to cervical cancer.
- The FDA has approved Gardasil, a vaccine against several common HPV strains, for females between the ages of 9 and 26 years as a way to prevent cervical cancer.

Warning Signs and Symptoms¹

- There are no early warning signs of the precancerous changes that can progress to cervical cancer.
- Once cervical cancer has developed, symptoms can include abnormal vaginal bleeding such as bleeding between menstrual periods, bleeding after sexual intercourse, and bleeding after menopause.

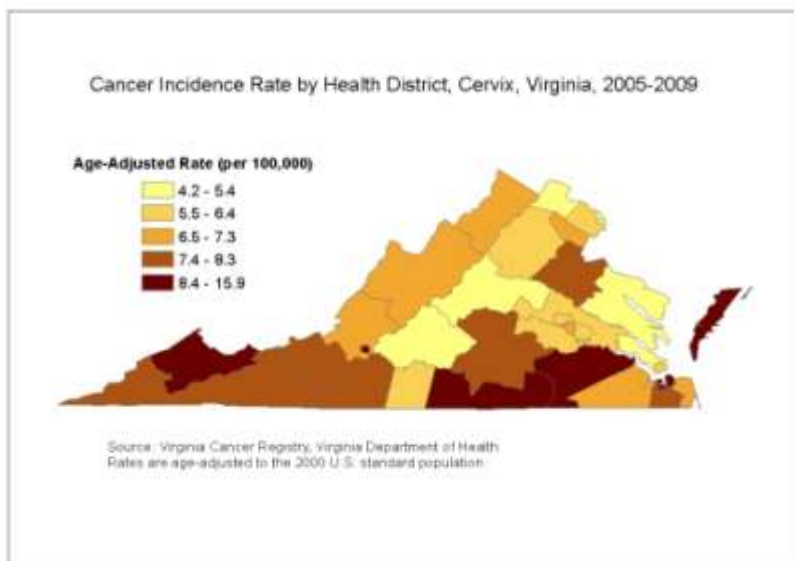
Early Detection¹

- Screening by Pap test according to guidelines

Cervical Cancer Facts

- Cervical cancer is not among the top ten cancers diagnosed, nor is it among the top ten causes of cancer death, among women in the United States. One in 145 women will be diagnosed with cervical cancer during her lifetime. Cervical cancer incidence and mortality have fallen substantially over the last several decades due to Pap test screening.¹
- Over the 2005-2009 time period, the incidence rate of cervical cancer was 6.6 cases per 100,000 women in Virginia.² (U.S. rate=8.1 cases per 100,000 women)³
- Figure 1 shows cervical cancer incidence rates by health district in Virginia. Eastern Shore, Roanoke, and Portsmouth had the highest incidence rates of cervical cancer among the 35 health districts.²

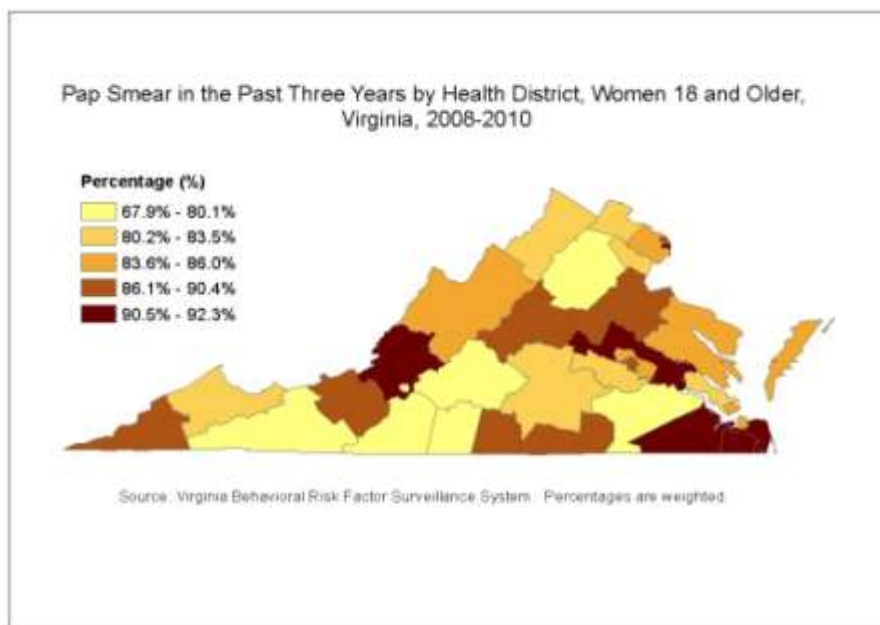
Figure 1



Cervical Cancer in Virginia

- Over the 2006-2010 time period, the mortality rate from cervical cancer was 2.1 deaths per 100,000 women in Virginia.⁴ (U.S. rate=2.4 deaths per 100,000 women)⁵
- Cervical cancer incidence rates (per 100,000) were 7.2 for African-American women and 6.4 for white women.² African-American women had a mortality rate that was 89% higher than that of white women.⁴
- Cervical cancer has a five-year relative survival rate of 92 percent if diagnosed in its earliest (local) stage when it is most curable.¹ In Virginia, 49% of cervical cancer diagnosed was local stage.²
- White women (51%) were more likely to have their cervical cancer diagnosed local stage than African-American women (40%).²

Figure 2



- According to 2010 health behavior survey data, 85% of Virginia women aged 18 years and older reported having had a Pap test in the previous three years. (U.S. average=81%)⁶

- Figure 2 shows cervical cancer screening prevalence by health district in Virginia. Mount Rogers, Central Virginia, and Pittsylvania/Danville had the lowest percentages of Pap test screening among the 35 health districts.⁷

• Pap test screening prevalence was lower among women who were less educated, lower income, and uninsured. The prevalence of Pap test screening was 87% in African-American women and 84% in white women.⁷

- In Virginia in 2010, there were 243 inpatient hospitalizations for cervical cancer, at a total cost of over \$7.9 million. The average length of stay was 3.6 days and the average charge per stay was \$32,343.⁸

¹American Cancer Society *Cancer Facts & Figures 2009* (<http://www.cancer.org>)

²Virginia Cancer Registry. Based on combined data from 2005-2009. Rates are age-adjusted to the 2000 U.S. standard population.

³Howlander N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA (eds). SEER Cancer Statistics Review, 1975-2009 (Vintage 2009 Populations), National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2009_pops09/, based on November 2011 SEER data submission, posted to the SEER web site, April 2012. Based on combined data from 2005-2009. Rates are age-adjusted to the 2000 U.S. standard population.

Cervical Cancer in Virginia

⁴VDH Division of Health Statistics. Based on combined data from 2006-2010. Rates are age-adjusted to the 2000 U.S. standard population.

⁵ Miniño AM, Murphy SL, Xu JQ, Kochanek KD. Deaths: Final data for 2008. National vital statistics reports; vol 59 no 10. Hyattsville, MD: National Center for Health Statistics. 2011. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr59/nvsr59_10.pdf. National rate is the 2008 age-adjusted rate, which is comparable to the state five-year interval midpoint.

⁶ Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2010. (<http://apps.nccd.cdc.gov/brfss>) Accessed 6/19/12.

⁷ Virginia Behavioral Risk Factor Surveillance System. Based on 2008 and 2010 data (pooled). Percentages are population-weighted.

⁸ VDH Virginia Health Information Hospital Discharge Patient-Level Dataset.



Virginia Comprehensive Cancer Control Program • University of Virginia Cancer Center • 434-243-0433